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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/816,609

04/02/2004

David B. Finkenbinder

4570.94

9822

26360

7590

10/15/2007

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EXAMINER

HAMO, PATRICK

ART UNIT

PAPER NUMBER

3746

MAIL DATE

DELIVERY MODE

10/15/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/816,609

Applicant(s)

FINKENBINDER ET AL.

Examiner

Patrick Hamo

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 August 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

This action is in response to amendments filed on August 6, 2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 7-9 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wentz, 5,567,127 in view of Morimoto et al., 5,219,648.

Wentz discloses a motor and fan unit 14, wherein the motor includes a stator with windings 74, the fan coupled to the rotating shaft 82 of the motor and generating an airflow that passes over the motor (col. 1, ll. 20-34), the motor and fan encapsulated in a foam layer 16 or sleeve, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and an inwardly curved opening for the motor at the other end (fig. 1), the motor extending through the opening and part of the motor assembly, the leads, contacting the sleeve (col. 9, ll. 29-32).

However, Wentz does not disclose the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Wentz with Morimoto in order to absorb sound and protect from heat and flame (col. 2, ll. 3-36). Note that the combination would protect the motor from heat without the use of a temperature sensor, as neither Wentz nor Morimoto require a temperature sensor.

Claims 1 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Finkenbinder et al., 6,703,754 in view of Wentz and further in view of Morimoto.

Finkenbinder '754 discloses a motor and fan unit 10, the fan 26 coupled to the rotating shaft 20 of the motor 16 and generating an airflow that passes over the motor, a diffuser/bracket assembly also receiving the shaft, the diffuser/bracket assembly comprising a fan end bracket 35 and a diffuser 90 (see fig. 1) coupled to the fan end bracket, the fan end bracket comprising a planar plate 36 having bracket openings 75 adjacent to the motor bracket and the fan end bracket having at least one motor bracket 37 for carrying the motor assembly, the diffuser having peripheral openings (fig. 13) and a fan shroud 30 with an inlet port 31 and peripheral exhaust ports 34 enclosing the fan and secured to the fan end bracket.

However, Finkenbinder '754 does not disclose the following taught by Wentz: the motor and fan encapsulated in a foam layer 16 or sleeve, wherein the motor includes a stator with windings 74, a casing 12 or cover attached to the sleeve, the cover attached to the fan assembly at one end and including an inwardly curved opening for the motor at the other end (fig. 1), the motor extending through the opening and part of the motor

assembly, the leads, contacting part of the sleeve (col. 9, ll. 29-32), and a flange 94 that encourages a labyrinth air flow in order to absorb noise for quieter operation (Abstract, ll. 17-20).

Furthermore, neither Finkenbinder '754 nor Wentz teach the following taught by Morimoto: a melamine foam that absorbs sound and includes self-extinguishing flame properties for protection from heat and flame (col. 2, ll. 3-36).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified Finkenbinder '754 with Wentz and Morimoto in order to absorb noise for quieter operation (Wentz, Abstract, ll. 17-20) while also protecting the assembly from heat and fire damage (Morimoto, col. 2, ll. 3-36).

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over the references as applied to claims 10-12 above in view of Parker et al., Pat. Pub. No. 2004/0165986.

The references as applied to claims 10-12 above teach all the limitations substantially as claimed except for the following taught by Parker: foam 1235 being disposed on the surfaces of the blades 1200 in order to reduce the noise from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Therefore it would have been obvious to one having ordinary skill in the art at the time of the invention to have modified the references as applied to claims 10-12 above with Parker in order to further reduce the noise of the assembly by reducing the noise

from the diffuser and increase air flow performance of the rotating blades (p. 4, paragraph 0049).

Response to Arguments

Applicant's arguments filed August 6, 2007 have been fully considered but they are not persuasive. It is the opinion of the examiner that it is reasonable to interpret the motor leads, with or without encapsulated insulation, as part of the motor assembly. Therefore, the limitation that the sleeve is in touching contact with at least one of said electric motor and windings does not patentably distinguish over the teaching of Wentz, where the motor leads contact a foam layer. The applicant argues that the insulated motor leads are already provided with a heat and flame resistant coating, presumably to argue that they require no more insulation. However, this does not change the fact that Wentz discloses that they are in touching contact with the noise suppression sleeve, whether the added insulation is necessary for the leads or not. When Wentz is modified with the teachings of Morimoto to use a noise *and* heat insulating sleeve, the leads would still be in contact with this sleeve, and hence read on the limitations submitted by the applicant. Although the heat generating elements of Wentz are kept away from the sleeve, it does not preclude improvement through the modification of the sleeve with that of Morimoto in order to make the sleeve heat insulating.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Patrick Hamo whose telephone number is 571-272-3492. The examiner can normally be reached on M-F 8:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Devon Kramer can be reached on 571-272-7118. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3746

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



PH

Devon Kramer
Supervisory Patent Examiner
Art Unit 3746

DEVON C. KRAMER
PATENT EXAMINER

Devon Kramer
10/12/07